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Medical-social estimation and monitoring of foreign students health status studying in the Republic of Kazakhstan

The generalization of the personal experience of students in the development of a project to study the determinants of health and the impact of preventive measures in relation to the health of students-foreigners in KSMU at the departments of physiology; social medicine and organization of health care. Formation of a healthy way of life is a determining factor in the upbringing of the students of KSMU. In order to study the health status of students from India and Pakistan, a survey was conducted among the students of the first--the fifth year of medical faculty of KSMU. Students assessed the state of their health as excellent (38 %), average (57 %), poor (5%). For improvement of health status of students take a balanced diet (67 %), sports (33%).

Key words: organism, environment, diseases, health, development, deterioration, national safety, young generation, rehabilitation, physical exercises.

Relevance of investigation

The modern conditions of life demand much of a person's organism. A changed living environment in connection with anthropogenesis pollution of nature, conditionally «drinking» water, an intensive rhythm of a life, the psychological loadings, the non-solved conditions of distress, not adaptive medicament us means create preconditions to intense functioning of all the systems, and insufficient adaptable possibilities of an organism result frequently in diseases.

The official medicine considers that absolutely healthy people in modern society are not present. 70 % of the population suffers from those or other diseases, 30 % are not sick, but not already healthy. It is known that to prevent illness much more easy, than to cure it. Unfortunately, during last decades of XX century it was paid so little attention to problems of harmonious development of a healthy person, the prevention of illnesses' development [1–5].

Preservation and strengthening of health of teenagers and youth is one of actual problems of public health services. The decision of the given problem has the high social importance and enters into number of the major problems of the state as health of young generation makes a fundamental basis for formation of reproductive, labour potential of the country and is the factor of national safety and a prime strategic direction of republic.

Prompt rates of deterioration of health of young and adult generation conduct to adverse social and economic consequences, create psychological problems both in a family, and in the course of school and high school education. Such tendencies dictate necessity of introduction of the new organizational, preventive and medical technologies promoting increase of health of young generation. According to a number of authors, health of students tends to deterioration. Here play a role a complex of the new factors specific to the higher school, change in the maintenance of the educational activity, leading to that compensatory adaptation organism mechanisms do not cope with loadings. The last leads to an exhaustion and adaptation failure that forms an illness basis [6–9].

One of such rehabilitation programs is employment by physical exercises and sports. Today there is no necessity to prove huge value of regular employment by physical exercises for strengthening of health, the prevention of diseases, increase of stability and resistibility of an organism. The health problem has special value for sports. Sports make direct impact on preservation correct integrative reactions of an organism to physical activities.

It is known, that the person health status is depending on medicine — 10–15 %, on external factors — 25–30 % and on the person life — 60 %. Therefore questions of formation of the conscious and responsible attitude to health of each person as to public property should become norm of life and behavior of all people and especially students. It assumes eradication of harmful habits, education of culture of communication, behavior, meal, observance of work and rest mode, regular going into physical culture and sports, increase of general sanitary culture and hygienic knowledge. Propagation of healthy way of life is one of the main problems of the WHO.

Healthy life style includes a totality of behaviors that are relevant in promoting and maintaining health and in reducing risks of falling ill. Negative life style comprises behaviors that imply health risks. World Health Organization states that over 50 % of illnesses and deaths are caused by a pathogenic life style.

In the message of the President of the country to the people of Kazakhstan «Kazakhstan–2030» one of long-term priorities defines health, formation and well-being of citizens of Kazakhstan. Preservation and strengthening of children and youth health is one of actual problems of public health services. The decision of the given problem has the high social importance and enters into number of the major problems of the state as health of young generation makes a fundamental basis for formation of reproductive, labour potential of the country and is the factor of national safety and a prime strategic direction of republic [10- 12].

The purpose of investigation: to identify health status and promoting a healthy lifestyle among foreign students studying in KSMU, presence of harmful habits, frequency of use of alcoholic drinks and use of narcotics; to develop the concept of strengthening of health of teenagers and youth of Kazakhstan, to carry out monitoring of influence of sports on health of foreign students in Republic Kazakhstan

Problems:

1. To carry out the analysis of the medical-demographic characteristic of age group of 17–25 years, indicators of health, the behavioral factors forming a way of life of foreign students of Republic Kazakhstan.
2. To spend modeling and to estimate degree of influence of the cores behavioral a determinant on a state of health of foreign students.
3. To study legislative base in the field of health protection and rendering of medical aid to foreign students about conformity to their age features and requirements.
4. To carry out monitoring of influence of sports on health of foreign students in Republic Kazakhstan
5. To develop conceptual model of strengthening of health of foreign students of Kazakhstan.
6. To reveal the factors worsening quality of a life of foreign students youth in Republic Kazakhstan.

On department of social medicine and organization of public health services are studied problems, which are influenced on health status of people.

It is known that social medicine is the science of social conditionality of health, the social functions, structure, staff of public health, health management of public health.

Actual tasks of public health in modern conditions are:

1. Development of the concept of public health and health development
2. Developing the legal base protecting and improving the health of citizens,
3. Examination of trends in public health in relation to the changing socio-economic conditions.
4. Study of the economic aspects of health, the introduction of the new economic mechanism and economic methods of health management and broad changes in management and marketing management public health.
5. Study of public health concerns insurance.
6. The scientific study of various models of health management
7. Studies of health problems in the mixed ownership and market relations.
8. Training of social medicine and health care management and marketing managers.
9. Development of the primary health care systems, including general practitioners and family doctor.
10. Research on the social security health care workers, medical ethics and deontology in contemporary conditions.
11. Problems healthy lifestyle (HLS) [13–17].

One of the themes of the curriculum of subject «Public health» is «Health care in foreign countries», where we provide information about the history of health, models, problems and prospects of public health in foreign countries.

By the study of subject we are considered the trends in the foreign experience in organizing and reform of national health systems. Students are given information on the reform of health care in other countries, factors of adaptation and adjustment mechanisms to reform for local, Kazakhstan's conditions, which are essential key elements in achieving success in the reform of public health in Kazakhstan.

Due to the fact that in recent years, Kazakhstan has made considerable economic growth, resulting in increased funding for the health sector, as well as creates prospects for its further development.

Currently, Kazakhstan is in the process of creating a single national health system of the Republic of Kazakhstan, based on the principles of free choice of doctor and patient medical organization, creating a competitive environment and transparency in the provision of medical services..

Implementation of the Unified National Health System in Kazakhstan in 2010, provides for a health model based on a centralized state payment of medical services guaranteed free medical care the use of economic levers medical social complex of the country, the introduction of the principles of free choice of doctor and patient medical organization, creating a competitive environment and transparency in the provision of medical services.

In particular, students from India and Pakistan, studying at the English Department KSMU have a real chance to see the mechanisms of reform of Kazakhstan's health system.

During work the Department of Social Medicine and Public Health Organization KSMU the following activity has taken place:

- Some material has been found, assessed and translated from Russian into English
- Illustrative material for the site has been partially collected (graphs, presentation of lectures, etc.)
- Materials for the general forecasting of the epidemics diseases has been selected and assessed
- Presentations on mathematical modeling of situation tasks spread prepared
- Materials for use local data in preventive programs targeting has been prepared.

Some materials that has been published on the Web-site KSMU were dedicated to the course of public health and included materials on social medicine, epidemiology, articles on healthily way of life. Interviews with students showed that many of them has accessed and read distance learning materials.

Well aware of the requirements of time, on the Department of Social Medicine and Public Health Organization KSMU created optimal conditions for the formation of active life position students to the processes taking place in society.

On the department it was created innovative platform for the development and implementation of new educational technologies. We introduce a problem-based learning. There are informatization of education, project method.

The methods include interactive learning methods that encourage student involvement in the process of obtaining and processing knowledge: problems, group, research forms of exercises, role-playing games.

Enhanced cognitive activity in the session can take place only if the student is not a passive listener in class, but if the student himself offers creative and solve problems.

The role of the teacher is reduced at the present stage of training to the role of consultant, unobtrusive coordinator of student activities at various occupations.

A student receiving an assignment from the teacher himself determines how may solve this problem. To do this, he or with a group of friends going to the library (to be well equipped educational reference), or looking for the answer to the question on the Internet.

Coming to class, expresses his proposals for the assignment the teacher who helps to assess the correctness of future action the student with the direct implementation of tasks (solving problems, performing laboratory work, etc.).

This phase of work teaches students a creative approach to the task, teaches him to act on their own, and activates his thinking. Educator is necessary to put such problems, which were closer to his future profession.

The emergence of personal computers, expanding their functionality, and most importantly, more and more widespread introduction of computers into the learning process creates the necessary prerequisites not only for the use of his teacher, but also to ensure prolonged contact of each student with a computer, during which, in fact, there is a process of computer training. But Internet technology is not so important to work on the job.

Rather, they help both teachers and students in the study of a topic, providing extensive training and methodological material. Interactive elements of training programs allow you to move from passive to active learning, because students are able to independently simulate the phenomena and processes, to receive the information is not linear, with a return, if necessary, to a fragment, with the repetition of the virtual experiment with the same or different initial parameters. Great help in this can have a computer workshop.

We, as a teachers, implement in their practice of interactive learning tools. We have created various situational problems, learning technology independent creativity, learning methods work with data banks and sources of development of intellectual capacity, in the formation of interest to the scientific research and self-development.

N.M.Kharissova is developed a multimedia complex of discipline, which included the presence of the library of computer models to illustrate the basic concepts studied themes, visual dynamic models, charts, diagrams, charts, drawings, interactive maps, etc.

The themes that were included in this module were General epidemiology, survey methods, database creation and analysis, analytical study design in epidemiology, decision analysis and clinical epidemiology.

It is intended to provide students with methods, analytical tools and conceptual knowledge required to understand public health issues. It is based on conveying academic knowledge and basic experience related to public health and on acquiring the necessary skills for the various functions which the students, as future public health professionals, will have to carry out at local, regional, or national level of the system, both in the public and the private sectors.

Widely we are used computer technology in teaching discipline to enhance the visibility, efficiency of management.

At the present stage of society development of effort of the higher school are directed on performance of the social order: preparation of the graduates capable independently to acquire necessary knowledge, skillfully to put them into practice for the decision of arising problems, competently to work with the information, to be sociable, contact in various social groups, to be able to work together in various areas and situations.

Thus the modern teacher should promote creation in educational process of such situations which would start mechanisms of development of the person, i.e. put students in a position when they and meaning make decisions concerning the set situational problem, state the point of view, incur responsibility for the presented decision — a word, gain experience of personal displays (personal experience).

At studying of discipline of the Social Medicine and Public Health Organization medical students study in the systematized types the most actual and interesting, our way to opinion, questions of management and economy of domestic and foreign public health services, medical insurance, formation and the right, medicinal maintenance, activity the WHO, a condition and factors of formation of public health, development of a world medical science.

Particular attention is paid to the in student projects on environmental sanitation, prevention of illness associated with exposure to adverse factors.

Students noted that with the improvement of socio-economic situation in the country's economy is more funding priorities. There is a growing development of private health care in order to create a competitive environment and providing people with the necessary medical care. Also note that at present the regions introduced minimum standards of health care to the population, helping to keep the primary health care network in terms of restructuring, allowing not leaving the villages without medical services.

There is effective involvement of students in scientific research, screening studies to monitor population health, health education, promotion of healthy lifestyles, etc.

During the workshops students can solve various situational problems from the field of statistics, demography, epidemiology, economics and health financing.

Therefore, they propose projects to improve the quality of medical care and urgent action to protect public health. During the classes offered situational tasks, where students learn to analyze environmental hygiene and socio-economic factors as isolation, and complex, which would significantly impair the health of the population.

Students receive personal experience in working with common databases and increased their knowledge about the organization and implementation of epidemiological research for policy making.

Project on study health determinants and influence of preventive measures on health of students in KSMU has been continued this year at the Department of Social Medicine and Public Health Organization.

In the message of the President of the country to the people of Kazakhstan «Kazakhstan-2030» one of long-term priorities defines health, formation and well-being of citizens of Kazakhstan. Preservation and strengthening of children and youth health is one of actual problems of public health services. The decision of the given problem has the high social importance and enters into number of the major problems of the state as health of young generation makes a fundamental basis for formation of reproductive, labour potential of the country and is the factor of national safety and a prime strategic direction of republic.

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education. Such tendencies dictate necessity of introduction of the new organizational, preventive and medical technologies promoting increase of health of young generation.

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In the course of research work have to deal with and physiology, and biology (biochemistry, biophysics), and medicine, and even physical modeling, etc. — That is, natural science, only conditionally separated into different research areas. Naturally, the most correct and complete description of the health of the population can occur only under the condition of close interaction between experts a wide range of natural sciences. It is an interdisciplinary approach to health preservation is a priority for research activities.

Now laboratory-tool researches of the teenagers who are not engaged actively in sports and teenagers, engaged in minifootball are conducted. Researches include: definition of parameters of external breath by spirograf, using of the electrocardiogram.

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The results of the study the health status of foreign students were reported at the student conference.

Investigation methods: To identify the health status of students we have developed a special questionnaire. Cross-sectional study was performed by departments the Social Medicine and Public Health Organization and Physiology in 2007–2011. All students gave their informed consent to participate in the study by answering the questionnaire. The 'Student Health Survey 2007–2011 questionnaire included a total of 57 questions related to physical, mental, and social health, health behavior, health-related attitudes, and the used of health services. The survey also are included some special questions related to the theme 'Health'.

Object of investigation: A random sample of undergraduate university students of 3–5 course aged 17–25, which studying on foreign department of KSMU. The total numbers of surveyed students were 150 persons, who included 130 men (87 %), and 20 (13 %) women. Students have been divided into age groups: under 22 years old — 32 students (21 %), 22–25 years old — 118 students (79 %).

Results of investigation

There are a lot of foreign students from India and Pakistan, who studying in KSMU. Foreign students arriving in Kazakhstan change the habitual inhabitancy, habits, style of a life. Teachers help students from overseas adjust to life in Kazakhstan and prepares them for the cultural challenges they will encounter such as the availability of alcohol and seeing people kissing in public.

Although, many students may experience some homesickness in the beginning, once they are acclimated to the social life of Kazakhstan, the experience can be life transforming. Studying abroad can expand one's intellectual horizon. From an informed and real-life perspective, students are able to learn about international affairs and how geopolitics and economic factors affect the world in which we live.

Students can: to improve cross-cultural communication skills; to Gain the ability to adapt and be flexible to new circumstances; to constructively cope and deal with differences.

What's the life for any student? What are the conditions? What is their wish? Their motivations? Their hopes? Their daily problems? Who are they? What means to be a student? What means to be a student in foreign country? What are the benefits of that? And so much more existing questions in their minds...

All students have their own life, especially if they live in a foreign country, such as Kazakhstan. All the foreign students have the same problem as: washing clothes, washing dishes, making meal and they always have time and place for limitless possibilities and student power to invest their time in distinctive and vibrant ways.

In free time they have possibilities for research, sports, social events, nightlife, theatre and the arts, hiking & outdoor recreation, and all levels and types of social activity. All foreign students which are in Kazakhstan have one same life style no matter where are they from: Pakistan, India etc. Every foreign student knows how to make meal no matter, what sex it is, male or female.

Formation of a healthy way of life is defining in education of students KSMU.

One of the leading problems of students, which studying at the General Medicine faculty is formation of rising generation of the careful and quivering attitude to health. Therefore first of all we sort out such con-

cept as health, a healthy way of life, and factors determining it. We're talking about the balanced diet, hardening or absence of harmful habits.

The analysis of student's answers has revealed the following.

The exhaustion of students comes more often after the fourth hour of study — 51 %, after the fifth — 23 %, after the sixth — 16 %.

Many students have not time to have breakfast, eat irregularly, accept food only 2 times a day.

Some students criticize the conditions of the student's hostel which are miserable, uncomfortable, and not satisfying for the basic student needs.

Students have specified problems in the organization of a life, study: Lack of nutritious food; Sports hall is in hostel, but it is not enough, if not possible then it should be in university every day at time list 2 hour; continental climate because in this climate students can't jog.

From recent time students train by sport more and frequently in KSMU — nowadays helpful subject accompanies students during all study process. The results are mainless, but have stable tendency to increase. Students training by sport long time — 33 %, short time— 45 %.

Physical activity is estimated as easy — 29 %, average — 45 %, heavy — 26 %.

Students have estimated a condition of their health, as excellent — 38 %, normal — 57 %, badly — 5 %.

Students were ill 1–3 times — 21 %, more than three times — 18 %, were not ill — 61 % in educational year. For improvement of the health students accept the balanced food — 67 %, train by sport — 33 %.

Results of research have shown that percent of the diseases among students of 3 courses more on 14 %, than among students of 5th course, connected with their adaptive possibilities to residing conditions in Kazakhstan (Fig.).

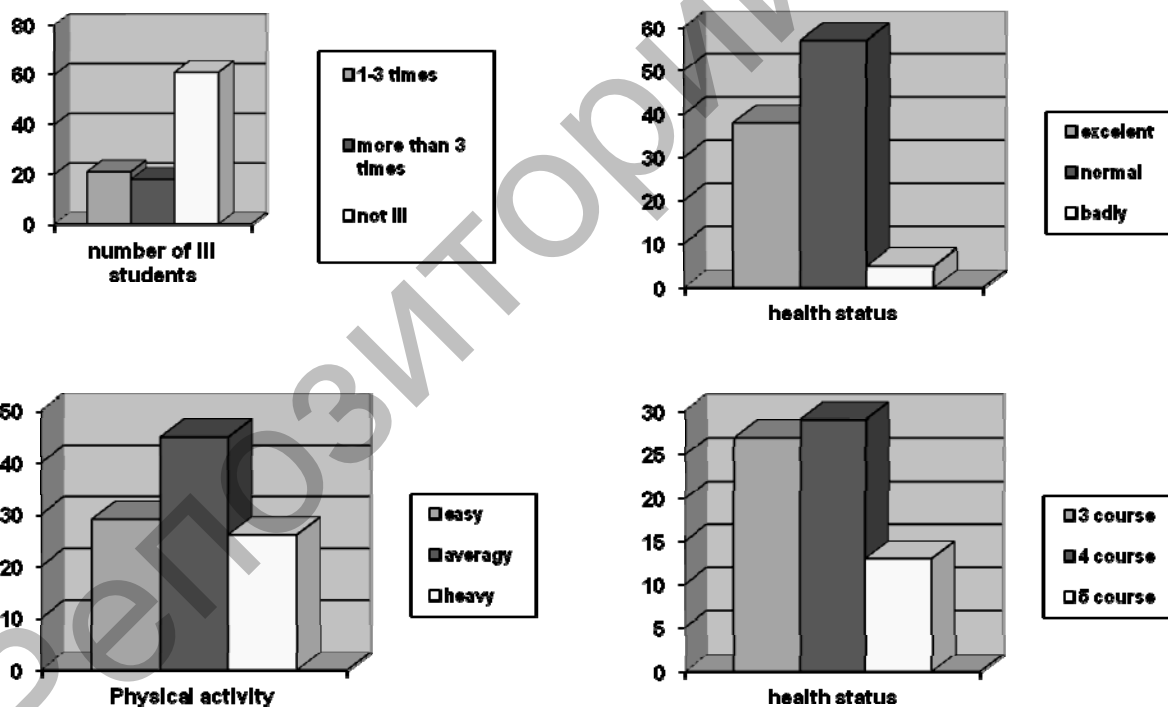


Figure. Indicators of health status of students

Practical significance:

Students noted Pathogenic and Healthy components of a way of life.

Pathogenic components of a way of life include: Smoking, Excessive consumption of alcohol, Drug consumption, Irrational food, Sedentary style, Disequilibrium between work and leisure, Unprotected sexual relationships, Lack of periodical medical examinations.

Healthy life style components include: 7–9 hours of sleep per day, Regular physical exercises, Maintaining weight within normal limits, Avoid smoking (active and passive), Limited consumption of alcohol, Breakfasts, Exclude eating between meals, Avoid drug consumption., Morning exercise which should include yoga jogging etc, Healthy Food (Nutritious), Should participate in any games or sports, Living at hygiene

Thus, the results of questioning showed that the propagation of healthy way of life is an essential problem of modern education of young generation.

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Қазақстан Республикасында оқитын шетел студенттер денсаулығын медициналық-әлеуметтік тұрғыдан бағалау

Мақала ҚММУ-дың физиология, әлеуметтік медицина мен денсаулық сақтауды ұйымдастыру кафедраларында шетелдік студенттердің денсаулығына қатысты денсаулықтың детерминанты мен алдын алу шаралардың әсерін зерттеу бойынша жобаны өңдеу барысында студенттердің жеке тәжірибесі қорытылған. Авторлар Үндістан мен Пәкістаннан келген студенттердің денсаулық жағдайын зерттеу мақсатында ҚММУ-дың емдеу ісі факультетінің бірінші-бесінші курстарында оқитын студенттерінің арасында сауалнама жүргізіп, денсаулықтарына медицина-әлеуметтік баға береді. Сонымен қатар мақалада шетелдік студенттердің салауатты өмір салтының басқа да құраушылары талданады.

В статье обобщен личный опыт студентов при разработке проекта по изучению детерминант здоровья и влияния профилактических мер на здоровье студентов-иностранцев в КГМУ на кафедрах физиологии; социальной медицины и организации здравоохранения. Авторы проводят результаты анкетирования студентов первого-пятого курсов лечебного факультета, на основании которых дается медико-социальная оценка состояния здоровья студентов Индии и Пакистана. В статье также анализируются составляющие здорового образа жизни студентов-иностранцев.